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EXAMINER	
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ART UNIT	PAPER NUMBER
2192	

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/612,529	SNODGRASS ET AL.	
	Examiner	Art Unit	
	Isaac T. Tecklu	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *09/10/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the application filed on 07/02/2003.

2. Claims 1- 24 have been examined.

Oath/Declaration

3. The office acknowledges receipt of a properly signed oath/declaration filed on 07/02/2003.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 depends on claim 17 instead of claim 7. For the purpose of examination dependence of claim 8 on claim 7 has been considered, and read as such – The dynamic [document] web page system of [claim 17] claim 7, wherein ...--

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3-17 and 19-24 are rejected under 35 U.S.C. 102(b) as being anticipate by Guenthner et al. (US 6,230,196 B1).

As per claim 1 Guenthner discloses a dynamic web page generation system (e.g. FIG. 1 and 4), comprising:

a template processor that generates dynamic web pages according to corresponding web page templates in response to page requests from browsers (in column 1, lines 51-55 "... generate a web page ...", FIG. 6 and FIG. 3 HTML Generator 45 and associated text),

wherein the template processor generates service requests to request content from a set of services, and uses the content returned by such services to generate the web pages (e.g. FIG. 3 and associated text), according to corresponding web page templates (in column 1, lines 51-65 "... in response to client request ...");

a monitoring component that monitors the operation of the template processor over time (in column 6, lines 40-50 "... requested resource monitored ...") and generates a mapping of page generation tasks to corresponding service calls that are made as part of such page generation tasks (in column 5, lines 22-30 "... HTML generator ... information is cached ... marinating current mapping ..."); and

a prefetch component that is responsive to a page request from a browser by using the mapping to identify a set of service requests to be made preemptively (in column 2, lines 35-44 " request ... by the client browser ..."), such that service content that is deemed likely to be used by the template processor to generate the requested page is prefetched (in column 2, lines 47-54 "... request , one of the other servers supporting the linked page is selected ...").

As per claim 3 the dynamic web page generation system of Claim 1, wherein the monitoring component updates the mapping substantially in real time to reflect service requests actually used to generate requested web pages (in column 6, lines 40-50 "... requested resource monitored ..."), such that service request predictions made by the prefetch component adapt automatically in response to page generation events (in column 6, lines 40-50 "... requested resource monitored ...").

As per claim 4 Guenthner discloses the dynamic web page generation system of Claim 1, wherein the prefetch and monitoring components include a prefetch client component that communicates with a prefetch service component (e.g. FIG. 4, element 56 and related text), wherein the prefetch client component is responsive to the page request by retrieving from the prefetch service component a listing of service requests associated with the page request, as reflected in the mapping (e.g. FIG. 4, element 54 and related text).

As per claim 5 Guenthner discloses the dynamic web page generation system of Claim 4, wherein the prefetch client is configured to send feedback messages to the prefetch service component identifying the service requests actually used to generate requested pages (in column 4, lines 5-14 "... web server routine ... result back to the client ..."), and the prefetch service component updates the mapping to reflect the feedback messages (e.g. FIG. 4, element 60 and related text).

As per claim 6 Guenthner discloses the dynamic web page generation system of Claim 1, wherein the monitoring component comprises an off-line analysis component that analyzes service request activity data collected over time to regenerate and/or update said mapping (in column 6, lines 1-10 "... determine whether the resource is available ...").

As per claim 7 Guenthner discloses the dynamic web page generation system of Claim 1, wherein the monitoring component and the prefetch component collectively operate so as to allow a second service request that is dependent upon a result of a first service request to be performed in parallel with the first service request, such that a latency caused by the chaining of dependent service requests is substantially avoided (in column 2, lines 15-25 "... shortest access time ...").

As per claim 8 Guenthner discloses the dynamic document generation system of Claim 17, wherein the prefetch component takes service load conditions into consideration in determining whether to make the service requests preemptively, so that unnecessary service requests are reduced during heavy service load conditions (in column 2, lines 15-25 "... shortest access time ...").

As per claim 9 a method for reducing dynamic document generation times, comprising:

for at least one document generation task, monitoring the performance of the task over time to generate data reflective of frequencies with which specific data retrieval subtasks are performed as part of the document generation task (in column 6, lines 40-50 "... requested resource monitored ...");

receiving a document request that corresponds to the document generation task (e.g. FIG. 4, element 56 and related text);

in response to receiving the document request, using said data to identify a set of data retrieval subtasks that are deemed likely to be performed as part of the document generation task to generate the requested document (e.g. FIG. 4, element 60 and related text); and

initiating at least some of the data retrieval subtasks in said set before they are initiated as the result of the performance of the document generation task, to thereby prefetch data that is deemed likely to be used to generate the requested document (in column 2, lines 45-53 "... later activated by user browsing ... retrieve the page ...").

As per claim 10 Guenthner discloses the method of Claim 9, wherein the data reflective of frequencies with which specific data retrieval subtasks are performed is incorporated within a table that maps document generation tasks to respective sets of subtasks (in column 5, lines 22-30 "... HTML generator ... information is cached ... marinating current mapping ...").

As per claim 11 Guenthner discloses the method of Claim 9, wherein the step of using the data to identify a set of data retrieval subtasks comprises looking up said set of data retrieval subtasks from a table that maps document generation tasks to corresponding subtasks (in column 2, lines 45-53 "... later activated by user browsing ... retrieve the page ...").

As per claim 12 Guenthner discloses the method of Claim 9, wherein the method comprises performing second data retrieval subtask that is dependent upon a result of a first data retrieval subtask without waiting for the first data retrieval subtask to be completed (in column 2, lines 45-53 "... later activated by user browsing ... retrieve the page ...").

As per claim 13 Guenthner discloses the method of Claim 9, wherein at least some of the data retrieval subtasks in said set are service requests (in column 2, lines 35-44 " request ... by the client browser ...").

As per claim 14 Guenthner discloses the method of Claim 9, wherein the document generation task corresponds to a particular dynamically generated web page (in column 1, lines 51-55 "... generate a web pages ...").

As per claim 15 Guenthner discloses the method of Claim 9, wherein the document generation task corresponds to plurality of related web pages (in column 1, lines 51-55 "... generate a web pages ...").

As per claim 16 Guenthner discloses the method of Claim 9, wherein the step of initiating at least some of the data retrieval subtasks comprises selecting subtasks to perform preemptively based at least in-part on current load conditions (in column 2, lines 45-53 "... later activated by user browsing ... retrieve the page ...").

As per claim 17 this is the document generation system version of the claimed web page generation system discussed above (Claim 1), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Guenthner.

As per claim 18 Guenthner discloses the dynamic document generation system of Claim 17, wherein the mapping comprises a table that maps URLs to data retrieval subtasks frequently used to respond to requests for such URLs.

As per claim 19 Guenthner discloses the dynamic document generation system of Claim 18, wherein at least some of the data retrieval subtasks that are performed preemptively are service requests (in column 2, lines 35-44 " request ... by the client browser ...").

As per claim 20 Guenthner discloses the dynamic document generation system of Claim 17, wherein the monitoring component updates the mapping in real time to reflect data retrieval subtasks actually used to generate requested documents (in column 2, lines 45-53 "... later activated by user browsing ... retrieve the page ...").

As per claim 21 Guenthner discloses the dynamic document generation system of Claim 17, wherein the prefetch component comprises a prefetch client component that communicates with a prefetch service component (e.g. FIG. 4, element 56 and related text), wherein the prefetch client component is responsive to the document request by retrieving from the prefetch service component a listing of data retrieval subtasks that are deemed likely to be used to respond to the document request, as reflected in the mapping (e.g. FIG. 4, element 54 and related text).

As per claim 22 Guenthner discloses the dynamic document generation system of Claim 17, wherein the monitoring component comprises a prefetch client component that communicates with a prefetch service component, wherein the prefetch client component is configured to send feedback messages to the prefetch service component identifying the data retrieval subtasks actually used to generate requested documents (in column 4, lines 5-14 "... web server routine ... result back to the client ..."), and the prefetch service component updates the mapping to reflect the feedback messages (e.g. FIG. 4, element 60 and related text).

As per claim 23 Guenthner discloses the dynamic document generation system of Claim 17, wherein the monitoring component comprises an off-line analysis component that analyzes task activity data collected over time to generate and/or update said mapping (in column 6, lines 1-10 "... determine whether the resource is available ...").

As per claim 24 Guenthner discloses the dynamic document generation system of Claim 17, wherein the prefetch component determines whether to perform a data retrieval subtask preemptively based at least in part on current load conditions (in column 2, lines 15-25 "... shortest access time ...").

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 2 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guenthner et al. (US 6,230,196 B1) in view of Field et al. (US 6,018,764).

As per claims 2 and 18, the rejection is incorporated to claim 1 and 17 respectively, and further Guenthner does not explicitly disclose the dynamic web page generation system of Claim 1 and 17, wherein the mapping comprises a table that maps URL to service requests frequently used to respond to requests for such URLs. However, Field in a related art discloses URL mapping table which is used to determine the appropriate broadcast address based on the URL command of the user request signal (in column 4, lines 6-15). Therefore it would have been obvious to one skilled in the art at the time of the invention was made to include the mapping table to map a URL or other identifier of an HTML page to another form of address which identifies a location. It is also possible to retrieve the HTML page corresponding to a user request signal as once suggested by Field (in column 6, lines 15-25)

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac T. Tecklu whose telephone number is (571) 272-7957. The examiner can normally be reached on M-TH 9:300A - 8:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Isaac Tecklu
Art Unit 2192

TUAN DAM
SUPERVISORY PATENT EXAMINER